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# California Regional Water Quality Control Board

## North Coast Region

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### FACT SHEET No. 2

#### **Contaminated Drinking Water Wells and Investigation of Groundwater Contamination in the Area of West College Avenue and Clover Drive Santa Rosa Sonoma County**

The North Coast Regional Water Quality Control Board (Regional Water Board) is investigating groundwater pollution in the area of West College Avenue at Clover Drive in Santa Rosa. The contaminant found in the groundwater in this area is a chlorinated hydrocarbon called tetrachloroethene, or PCE. PCE is an industrial solvent used for cleaning and degreasing and is generally associated with dry cleaning operations. A fact sheet containing this information was distributed door-to-door on September 7 and September 8 by Regional Water Board staff to residents living in the County island area on the south side of West College Avenue, the north side of West College Avenue, and along Lance Drive. Since September 8<sup>th</sup>, staff continued to provide fact sheets to residents during field sampling activities. With the mailing of this updated Fact Sheet, information is now also being provided by direct mail to residents in the area.

State and federal agencies have set standards for the contaminant levels allowable in drinking water. These standards are called Maximum Contaminant Levels (MCLs) and define the concentrations of certain chemicals that are allowed in drinking water while still providing protection of public health. The MCL for PCE is 5 parts per billion (ppb) or 0.0000005%. To date, over 80 wells have been sampled, and the majority of sampled wells currently do not show any detection of PCE. However, 15 wells have shown the presence of contamination. Two of these wells contain low levels of contamination not related to PCE contamination<sup>1</sup>. The remaining 13 wells are contaminated with PCE, at levels ranging from 2.53 ppb to 310 ppb. The locations of the affected wells are shown on Figure 1.

<sup>1</sup> The source of this other contamination, which is unrelated to PCE, is not known. However, sporadic, low levels of 1,1,1-trichloroethane have been found in some wells elsewhere in the state from use of household degreasing chemicals. The Regional Water Board staff will be further evaluating the presence of 1,1,1-trichloroethane to determine the likely source of this contamination. Re-testing of these wells is necessary. The MCL for 1,1,1-trichloroethane is 200 ppb.



A public health risk exists because the groundwater around the intersection of West College Avenue and Clover Drive contains PCE in excess of the established MCL. The State Department of Health Services, Environmental Investigations Branch, advised the Regional Water Board on September 27, 2000, that these contamination levels require measures be taken immediately to reduce or eliminate exposures through ingestion and inhalation (such as with showering).

Issues have arisen regarding when agencies knew PCE was contaminating groundwater in the area. To the Regional Water Board staff's knowledge, the first detection of PCE in any groundwater within 0.5 mile of the area occurred in 1991 as part of an investigation for contamination originating from the former West Coast Metals facility at 99 Frances Street<sup>2</sup>.

The property at 99 Frances Street is owned by Union Pacific Company (formerly Southern Pacific Transportation Company), and the Regional Water Board had directed the landowner to conduct an investigation of discharges of trichloroethylene (TCE) and similar solvent compounds. PCE was one of the solvent compounds detected at 99 Frances Street, and in groundwater west of the site. In 1991, solvent contamination emanating from the 99 Frances Street site appeared to extend approximately 4800 feet west of the site to Ridley Avenue, and was located north of West College Avenue. Solvents attributable to the 99 Frances Street site were found in several wells. In 1991, wells at 1114 Lance Drive, 1149 Lance Drive and 1230 Clover Drive (all north of West College) had PCE detected at levels of 0.4, 0.4 and 0.7 ppb, respectively. The detection of PCE in these wells was attributed at the time to the release of solvents at 99 Frances Street. Another chemical, carbon tetrachloride, was detected in a well at 1111 Lance Drive, and also at two nearby wells.

As Union Pacific investigated the extent of the contamination originating from 99 Frances Street, the shape of the groundwater contamination emanating from 99 Frances Street was established. The area south of West College Avenue was not believed at the time to be affected by these discharges. Union Pacific also determined that the carbon tetrachloride contamination found on Lance Drive did not originate from its site on 99 Frances Avenue. Further investigations of 1111 Lance Drive occurred in 1993, and the carbon tetrachloride contamination of groundwater was confirmed, along with poor containment of wastes from automobile repair activities at 1111 Lance Drive.

Additional investigation in the area occurred in 1995 and several solvents were detected in domestic water wells in the area, including PCE at levels of 4.0 ppb at 835 West College Avenue and 33 ppb at 1136 Clover Drive. Many of the detected solvents were attributed to the 1111 Lance Drive and 99 Frances Street sites. However, the PCE was attributed in 1995 to nearby dry cleaning operations at three potential sites, and limited further investigation of the dry cleaner operations commenced. In 1996, Regional Water Board staff received results from sanitary sewer sampling conducted that year which indicated potential multiple sources of dry cleaning chemicals. No subsequent sampling in the area north of College Avenue or south of College Avenue occurred until 1999.<sup>3</sup>

<sup>2</sup> Fact Sheets and notices were provided to area residents, and public informational meetings were held on the 99 Frances Street contamination case during the early 1990s.

<sup>3</sup> All detections of PCE and similar chemicals found by the Regional Water Board in drinking water wells were reported to affected residents, and to the Sonoma County Health Department by the



A well was sampled by a landowner south of West College Avenue in November 1999, and PCE was detected. Regional Water Board staff collected a confirmation sample of well water that same month and found PCE at 37.3 ppb in the well. Subsequently, Regional Water Board staff conducted a door to door well survey in December 1999 and January 2000 on West College Avenue and portions of Clover Drive in order to verbally inform residents of a potential threat and to obtain permission for sampling additional private wells.

Staff requested emergency funds from the State Water Resources Control Board for the purpose of paying for costs of water analyses. In August 2000, these funds became available and wells were sampled where permission had been granted. The first round of analytical results were reported in late August 2000 and show that a number of domestic water wells are impacted with concentrations of PCE at levels up to 310 ppb. Additional emergency funds up to \$22,000 were obtained in September of 2000 to expand the sampling efforts, and at the time of this writing thirteen wells have been found to have PCE contamination. **The level of PCE in well water poses a public health threat, and contaminated wells should not be used for drinking water.** Individual wells should be sampled to determine whether any contamination is present.

If you are a resident in the area and you pay a water bill, then you probably drink water supplied by the City of Santa Rosa. If you have a well, please be advised that there is a water line in West College Avenue to which residents along West College Avenue can currently connect. However, no public water line exists in the county service area south of West College and including Clover Drive, Wild Rose Drive, and Blossom Way. In these areas, hookup to the City of Santa Rosa water supply currently is not possible. Alternative water supplies are necessary for persons not connected to city water and where testing has revealed PCE contamination in their domestic well. Additional emergency funds were requested on October 27, 2000 to provide funds for purchasing well-head water treatment units and for funding connections to the City water supply. Tentative approval was received for additional emergency funding from the Cleanup and Abatement Account up to \$78,000. **Regional Water Board staff will be contacting residents whose wells contain PCE as soon as possible to develop a course of action for a replacement water supply. Until you know whether your well is safe to use or have an alternative water supply provided, you may limit exposure to PCE by following the enclosed guidelines from the Sonoma County Environmental Health Department.**

As of this date, Regional Water Board staff continue to seek permission to sample wells in the West College/Clover Drive area in order to provide information to residents about the quality of their well water and to obtain more information about the extent of PCE contamination. The party or parties responsible for this pollution have not yet been fully identified, and the Regional Water Board will continue to investigate possible sources of the contamination. Once a responsible party (or parties) is identified, the Regional Water Board will take actions pursuant to Sections 13267 and 13304 of

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Regional Water Board pursuant to the California Safe Drinking Water and Toxic Enforcement Act of 1986, also known as Proposition 65.



the California Water Code to ensure that a cleanup plan to treat the contaminated aquifer is developed and implemented to restore the beneficial uses of the water.

**The Regional Water Board staff has scheduled a public meeting on November 9 at 7:00 p.m. in the Auditorium at the Finley Center to explain well sampling results and the ongoing investigation. Information on this public meeting is enclosed.**

For additional information about this investigation, the public meeting, or to request that your domestic well be sampled you may call Jo Bentz at 707-576-2838.

Susan Warner  
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Investigations Division

Attachment    Figure 1

Enclosures:    Public Notice  
                     SCEHD Guidelines

